

**§142.0740 Outdoor Lighting Regulations**

(a) Purpose and Intent

- (1) Outdoor lighting fixtures shall be installed in a manner that minimizes negative impacts from light pollution including light trespass, glare, and urban sky glow in order to preserve enjoyment of the night sky and minimize conflict caused by unnecessary illumination.
- (2) Regulation of outdoor lighting is also intended to promote lighting design that provides for public safety and conserves electrical energy. ~~Outdoor lighting is regulated by the State of California's Building Energy Efficient Standards of Title 24 of the California Code of Regulations, parts 1 and 6 [Title 24]. No light fixtures shall exceed the light emission requirements of Section 142.0740 unless the light emission requirements of Section 142.0740 do not comply with Title 24's energy efficient standards.~~
- (3) Outdoor lighting fixtures shall be installed and operated in compliance with the following regulations, where applicable by law:
  - (A) California Energy Code, California Code of Regulations, Title 24, Part 6;
  - (B) Green Building Regulations (Chapter 14, Article 10); and
  - (C) Electrical Regulations (Chapter 14, Article 6).

- (b) ~~Outdoor lighting fixtures that are used to illuminate a premises, architectural feature or landscape feature on private property shall be directed, shielded, or located in such a manner that the light source is not visible offsite, to minimize light emission above the horizontal plane and so that light does not fall onto surrounding properties or create glare hazards within public rights of way.~~

(b) Applicability

All new outdoor lighting fixtures, including the replacement of previously conforming outdoor lighting fixtures, shall comply with Section 142.0740. Maintenance, repair, and replacement of parts within a previously conforming outdoor lighting fixture shall be exempt if the new parts are of generally the same type and size as those that comprise the existing outdoor lighting fixture.

- (c) General regulations that apply to all outdoor lighting:

Draft April 10, 2012

- (1) Outdoor lighting shall comply with the applicable California Energy Code lighting power requirement for the lighting zones identified on Map xxx filed in the office of the City Clerk.
- (2) Shields and flat lenses shall be required to control and direct the light below an imaginary horizontal plane passing through the lowest point of the fixture, except for:
  - (A) Residential entrance lights installed in accordance with the California Building Code and Electric Code requirements;
  - (B) Outdoor lighting fixtures less than 4,050 lumens including landscape lighting and decorative lighting;
  - (C) Outdoor lighting to meet Federal Aviation Administration requirements;
  - (D) A designated historical resource;
  - (E) Sports and athletic fields;
  - (F) Outdoor illuminated signs; and
  - (G) Maintenance to outdoor lighting when the following applies:
    - (i) The work does not involve the installation of a new light standard, a new lighting fixture or new wiring;
    - (ii) The work does not result in an increase in electrical load; and
    - (iii) Where applicable, the spacing of existing *previously conforming* light standards is greater than six times the mounting height of the existing outdoor lighting.
- (3) New outdoor lighting fixtures shall minimize light trespass in accordance with the Green Building Regulations where applicable, or otherwise shall direct, shield, and control light to keep it from falling onto surrounding properties. Zero direct-beam illumination shall leave the *premises*.
- (4) Outdoor lighting shall not exceed nominal 4000 Kelvin Color Correlated Temperature (CCT).

Draft April 10, 2012

- (5) All outdoor lighting, including search lights, shall be turned off between 11:00 P.M. and 6:00 A.M. except:
  - (A) Outdoor lighting may remain lighted for commercial and industrial uses that continue to be fully operational after 11:00 P.M. such as sales, assembly, and repair; and for security purposes or to illuminate walkways, roadways, equipment yards, and parking lots subject to the following:
    - (i) Adequate lighting for public safety shall be maintained. Outdoor lighting shall otherwise be reduced after 11:00 P.M. where practicable.
    - (ii) Within 30 miles of the Palomar and Mount Laguna observatories, outdoor lighting after 11:00 P.M. shall be limited to a maximum of 4,050 lumens per fixture or a maximum of 2500 Kelvin CCT.
  - (B) Outdoor lighting for the following is permitted to remain lighted after 11:00 P.M. and is exempt from the maximum Kelvin CCT and maximum lumen requirements specified in Section 142.0740(c)(4) and (c)(5)(A):
    - (i) Outdoor lighting used to illuminate recreational activities that are not in a residential zone may continue after 11:00 P.M. only when equipped with automatic timing devices and shielded to minimize light pollution.
    - (ii) Illuminated on-premises signs for businesses that are open to the public after 11:00 P.M. may remain lighted during business operating hours only. Illuminated off-premises advertising display signs shall not be lighted after 11:00 P.M. Signs located both on-and off-premises shall be equipped with automatic timing devices.
    - (iii) Outdoor lighting for automated teller machines and associated parking lot facilities and access areas shall be provided during hours of darkness in accordance with the California Financial Code Section 13040-13041.
  - (C) Outdoor lighting for illumination of the flag of the United States of America.
- (6) On properties which are adjacent to or contain sensitive biological resources, any exterior lighting shall be limited to low-level lights and shields to minimize the amount of light entering any identified sensitive biological resource areas.
- (7) Prior to installation of an outdoor light fixture, an Electrical Permit shall be obtained when required in accordance with Section 129.0302. When

an Electrical Permit is required, the *applicant* shall identify the proposed light fixture schedule to the satisfaction of the Building Official including the number of lumens and backlight, up light, glare rating for each fixture to demonstrate compliance with Section 142.0740.

- (c) ~~Outdoor lighting on commercial and industrial properties shall be equipped with automatic timing devices.~~
- (d) ~~Outdoor lighting fixtures that are existing and were legally installed before October 28, 1985, shall be exempt from Sections 141.0740(a) and (b), unless work is proposed over any period of time to replace 50 percent or more of the existing outdoor light fixtures or to increase the number of outdoor light fixtures by 50 percent or more on the *premises*.~~
- (e) ~~All outdoor lighting, including search lights, shall be turned off between 11:00P.M. and 6:00A.M. except:~~
  - ~~(1) Outdoor lighting in conjunction with commercial and industrial uses that continue to be fully operational after 11:00P.M. such as sales, assembly, and repair may remain lighted after 11:00P.M., provided that all lights are shielded, equipped with automatic timing devices, and utilize only the minimum amount of light necessary to conduct such uses;~~
  - ~~(2) Outdoor lighting used for security purposes or to illuminate walkways, roadways, equipment yards, and parking lots may remain lighted after 11:00P.M. where the lighting meets the following criteria:~~
    - ~~(A) Where located within 30 miles of the Palomar Observatory or Mount Laguna Observatory, lighting fixtures below 4,050 lumens are permitted. Lighting fixtures above 4,050 lumens shall be limited to low pressure sodium or high pressure sodium equipped with full cut off optics (fixtures with flat lenses that limit lamination to below the horizontal plane of the fixture or 0 percent up light). Where high pressure sodium lighting fixtures are proposed, a photometric study or lighting power density calculation of ground lighting levels shall be required to demonstrate that a 3 footcandle or 0.19 watts per square foot average will not be exceeded.~~
    - ~~(B) Where located 30 miles or more from the Palomar Observatory or Mount Laguna Observatory, lighting fixtures below 4,050 lumens are permitted. Lighting fixtures above 4,050 lumens shall be limited to low pressure sodium or high pressure sodium and equipped with cut off optics (fixtures that limit illumination to less than 2.5 percent up light).~~

- ~~(3) Outdoor lighting used to illuminate recreational activities that are not in a residential zone may continue after 11:00P.M. only when equipped with automatic timing devices and shielded to minimize light pollution; and~~
- ~~(4) Illuminated on-premises signs for businesses that are open to the public after 11:00P.M. may remain lighted during business operating hours only. Illuminated off-premises advertising display signs shall not be lighted after 11:00P.M. Signs located both on- and off-premises shall be equipped with automatic timing devices.~~
- ~~(5) Outdoor lighting for automated teller machines and associated parking lot facilities and access areas shall be provided during hours of darkness in accordance with the California Financial Code Section 13040-13041. Lighting fixtures shall be directed or shielded so that light does not fall onto surrounding properties or create glare hazards within public rights-of-way.~~
- ~~(f) On properties which are adjacent to or contain sensitive biological resources, any exterior lighting shall be limited to low-level lights and shields to minimize the amount of light entering any identified sensitive biological resource areas.~~
- (d) Outdoor lighting within the Centre City Planned District, Gaslamp Quarter Planned District, and Marina Planned District is exempt from the flat lens, color temperature, and curfew requirements identified in Section 142.0740(c)(2), (4), and (5) in order to meet the unique needs of downtown including active night time commercial and entertainment uses, high pedestrian activity, and enhancement of the City's downtown skyline in accordance with the Downtown Community Plan.
- (e) Temporary outdoor lighting (including lighting for temporary uses, special events, and seasonal holiday lighting) is exempt from Section 142.0740(c)(2), (4), and (5) where the lighting does not exceed 60 consecutive days or more than 120 days during any one year period.
- (f) Deviations from Section 142.0740 may be requested with a Process Four Planned Development Permit in accordance with Section 126.0602(b)(1).
- (g) Outdoor lighting on facilities or lands owned, operated, controlled or protected by the United States Government, State of California, County of San Diego, City of San Diego, or other public entity or public agency not subject to City of San Diego ordinances is exempt from the requirements of this division. Voluntary compliance with the intent of Section 142.0740 is encouraged.

#### §1410.0101 Purpose and Scope of the Green Building Regulations

The purpose of the Green Building Regulations is to improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of

**Comment [a3j1]:** A new Chapter 14, Article 10, Division 1 is being adopted by a separate ordinance to adopt the Green Building Standards Code (to be considered by City Council on an upcoming agenda).

The outdoor lighting ordinance will amend Chapter 14, Article 10 to reflect locally adopted differences that relate to outdoor lighting. See strikeout-underline language below for proposed changes that will occur with the outdoor lighting ordinance.

**Comment [a3j2]:** No change proposed to Section 1410.0101.

Draft April 10, 2012

building concepts that will reduce negative environmental impacts, create positive environmental impacts, and encourage sustainable construction practices in the following categories:

- (a) Planning and design;
- (b) Energy efficiency;
- (c) Water efficiency and conservation;
- (d) Material conservation and resource efficiency; and
- (e) Environmental quality.

**§1410.0102 When the Green Building Regulations Apply**

**Comment [a3j3]:** No change proposed.

- (a) This article shall be known as the Green Building Regulations of the City of San Diego and shall regulate the construction of new buildings within the City of San Diego, except work located primarily in a public right-of-way, public utility towers and poles, mechanical equipment not specifically regulated in the California Green Building Standards Code, and hydraulic flood control structures. The Green Building Regulations shall apply to City-owned buildings.
- (b) Where in any specific case different sections of the Green Building Regulations specify different materials, methods of construction, or other requirements, the most restrictive section shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall apply.
- (c) Wherever in the Green Building Regulations reference is made to the Appendix, the provisions in the Appendix shall not apply unless specifically adopted pursuant to San Diego Municipal Code Section 1410.0107.
- (d) The City of San Diego shall administer and enforce the Green Building Regulations of the City of San Diego in accordance with the applicable provisions of Chapters 11 and 12 of the San Diego Municipal Code.

**§1410.0103 Adoption of the 2010 California Green Building Standards Code**

**Comment [a3j4]:** No change proposed.

- (a) The 2010 California Green Building Standards Code, published and amended by the California Building Standards Commission [BSC], and as amended by the State Department of Housing and Community Development [HCD], is adopted by reference except as otherwise provided in this Article. A copy of the 2010 California Green Building

Draft April 10, 2012

Standards Code is on file in the office of the City Clerk as Document No. \_\_\_\_\_.

- (b) When reference is made to the California Green Building Standards Code, it shall be the 2010 California Green Building Standards Code, California Code of Regulations Title 24, Part 11, as published by the California Building Standards Commission.
- (c) Each of the regulations, provisions, conditions, and terms of the 2010 California Green Building Standards Code is made a part of this Article as if fully set forth in this article.
- (d) Numbering of sub-sections in this Article is cross referenced to sections in the 2010 California Green Building Standards Code.
- (e) The adoption of the 2010 California Green Building Standards Code shall in no way limit, prohibit, impede, or prevent the City Council from adopting ordinances limiting or preventing the issuance of any type, number, or geographical distribution of permits for construction or demolition of any facility for which a permit is required.
- (f) The Building Official is authorized to enforce only those amendments made by the following state agencies:
  - (1) California Building Standards Commission (BSC); and
  - (2) The California Department of Housing and Community Development (HCD).

**§1410.0104 Portions of the 2010 California Green Building Standards Code Not Adopted by the City of San Diego**

(a) Section 5.106.8.1 Effective date.

(b) “Reserved.”

**§1410.0105 Modifications to the 2010 California Green Building Standards Code Adopted by the City of San Diego**

~~No local modifications to the 2010 California Green Building Standards Code are adopted by the City of San Diego.~~

(a) Section 5.106.8 Light pollution reduction non- residential buildings.

(b) “Reserved.”

Draft April 10, 2012

**§1410.0106 Additions to the 2010 California Green Building Standards Code Adopted by the City of San Diego**

~~No local additions to the 2010 California Green Building Standards Code are adopted by the City of San Diego.~~

(a) Section 4.106.8 Light pollution reduction residential buildings.

(b) “Reserved.”

**§1410.0107 Adoption of Appendices to the 2010 California Green Building Standards Code**

Appendix Chapters to the 2010 California Green Building Standards Code are not adopted by the City of San Diego.

**Comment [a3j5]:** No change proposed.

**§1410.0108 Use of Alternate Materials, Design, or Construction Methods**

**Comment [a3j6]:** No change proposed.

- (a) The provisions of the Green Building Regulations are not intended to prevent the use of any alternate material, appliance, installation, device, arrangement, method, design or method of construction not specifically prescribed by the 2010 California Green Building Standards Code, provided that any such alternative has been approved by the Building Official.
- (b) An alternate material, design or construction method shall be approved on a case-by-case basis where the Building Official finds that the proposed alternate complies with the intent of the provisions of the 2010 California Green Building Standards Code and is at least the equivalent of standards prescribed in the Code for planning and design, energy, water, material conservation and resource efficiency, environmental air quality, performance, safety and the protection of life and health.
- (c) When considering the use of alternate materials, design, or construction methods, the Building Official shall evaluate equivalency based on the compliance provisions of the 2010 California Green Building Standards Code for occupancies regulated by adopting state agencies as are found in the sections listed below.
  - (1) Section 1.2.2 in the California Building Code (CBC) for the California Building Standards Commission.
  - (2) Section 1.8.7, Chapter 1, Administration, Division 1, of the 2010 California Building Code and Section 1.2.6, Chapter 1, Administration, Division 1, of the 2010 California Residential



Draft April 10, 2012

Code for the Department of Housing and Community  
Development.

**§1410.0401 Light Pollution Reduction Residential Buildings.**

(a) Section 4.106.8 is added to the California Green Building Standards Code pursuant to Section 1410.0106 of the San Diego Municipal Code in accordance with Section 1410.0401(b).

(b) 4.106.8 Light pollution reduction.

Outdoor lighting systems installed on residential buildings shall comply with the following requirements:

(1) The requirements in the California Energy Code for Lighting Zones 1-4 as defined in Chapter 10 of the California Administrative Code and identified on the City's adopted Map xxx filed in the office of the City Clerk;

(2) Backlight, Uplight and Glare (BUG) ratings as defined in IESNA TM-15-11 for Lighting Zones referenced in Section 1410.0401(b)(1)(i) shall not exceed those shown in Table 5.106.8 of the California Green Building Standards Code; and

(3) City of San Diego Outdoor Lighting Regulations in Section 142.0740 of the Land Development Code, including local requirements that are more restrictive than the California Green Building Standards Code in Section 142.0740(c)(2) for shields and flat lenses and requirements in Section 142.0740(c)(3) to minimize light trespass.

(4) Exceptions:

(A) Luminaires that qualify as exceptions in Section 147 of the California Energy Code

(B) Emergency lighting

**§1410.0501 Light Pollution Reduction Non- Residential Buildings.**

(a) Section 5.106.8 of the California Green Building Standards Code is adopted as modified pursuant to Section 1410.0105 of the San Diego Municipal Code in accordance with Section 1410.0501(b).

(b) 5.106.8 Light pollution reduction.

Draft April 10, 2012

Outdoor lighting systems installed on non-residential buildings shall comply with the following requirements:

- (1) The requirements in the California Energy Code for Lighting Zones 1-4 as defined in Chapter 10 of the California Administrative Code and identified on the City's adopted Map xxx filed in the office of the City Clerk;
  - (2) Backlight, Uplight and Glare (BUG) ratings as defined in IESNA TM-15-11 for Lighting Zones referenced in Section 1410.0501(b)(1)(i) shall not exceed those shown in Table 5.106.8 of the California Green Building Standards Code; and
  - (3) City of San Diego Outdoor Lighting Regulations in Section 142.0740 of the Land Development Code, including local requirements that are more restrictive than the California Green Building Standards Code in Section 142.0740(c)(2) for shields and flat lenses and requirements in Section 142.0740(c)(3) to minimize light trespass.
- (c) Section 5.106.8.1 of the California Green Building Standards Code is not adopted pursuant to Section 1410.0104 of the San Diego Municipal Code.